a bracket built into the eastern wall, and is as steady as can be expected at such a height in the midst of a crowded city.

A Dent's dipleidoscope, furnished with a telescope, is fixed to the same bracket.

A sidereal clock stands, or rather is hung, in the south-east corner, and an electro-magnetic dial, by Shepherd, occupies the space between it and the south door. The latter shows Greenwich mean time, and is connected with an electro-magnetic pendulum and another dial, in a distant part of the premises, on the ground-floor.

The thermometers, by Negretti and Zambra, have wet and dry bulbs. A patent maximum and a minimum thermometer are arranged on a stand outside the north window.

A Glaisher's rain-guage is erected 10 inches above the roof, and its cistern is also placed outside the north window.

A standard barometer, Barrow's, No. 25, is hung against the eastern wall of the lower platform, and is 164 feet above the level of the sea.

This paper was accompanied by a plan of the Observatory, and a few observations of Comet III., 1853, by Mr. H. S. Ellis.

Notes on the Appearance of the Zodiacal Light in the Spring of 1853. By T. W. Burr, Esq.

The atmosphere being exceedingly transparent, and the horizon clear round my residence at Highbury, I had since January kept watch for the appearance of the zodiacal light, but it was not until Friday, 11th March, that I was able to distinguish it. On that evening the sky was perfectly cloudless and the air calm. The sun and moon had both set by $7^h\ 30^m$ mean time, and the yellowness of the twilight having also disappeared, the desired luminosity became visible in the western part of the heavens. It was a very long cone or lenticular-shaped beam of nebulous milky light, starting from the western part of the horizon, but having more of its base to the north than south of that point. The angle made with the horizon was considerable, being about 45°, and the breadth at the base about 30°. These measures were only approximate estimations. The upper edge of the cone was less distinct than the lower, which was well defined. The point could be traced very nearly to the Pleiades, where it was lost. This group was then about three hours past the meridian, and about 50° in altitude. The point was not rounded off in the manner usually described and drawn, but sharper, so that the whole light looked much like half of the nebula in *Andromeda*, as drawn in Sir J. Herschel's *Outlines of Astronomy*. The stars α, β, and γ *Arietis* were immersed in the beam of light; *Saturn* shone brightly, just beneath its lower edge; and the principal stars of *Andromeda* were beyond the northern boundary. The light appeared generally to follow the line of the ecliptic, and to extend about 65° from the sun's place.

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1853MNRAS..14R..46.

It was equal in brightness to the portion of the Milky Way in *Cepheus* and *Cassiopeia*, then visible; and its presence made a striking contrast between the western sky and the dark blue of the eastern heavens. The light was watched till 8^h 30^m, when it was still visible, but much fainter, and not reaching beyond *Saturn.*

At the close of the Meeting the President stated that operations had commenced for determining the difference of longitude of Brussels and Greenwich by means of galvanic signals, with the view of thereby forming an electric communication between Greenwich and the principal Observatories of the Continent. Observations of signals and of transits had been already made for this purpose at Brussels by Mr. Dunkin of the Greenwich Observatory, and at Greenwich by M. Bouvy, one of the assistants of M. Quetelet, the Director of the Royal Observatory of Brussels. The Observers were subsequently to exchange positions, by which means it was to be hoped that all personal equation, both for the transit observations and for the observation of the signals, would be completely eliminated. With respect to the velocity of the electric current, the President remarked that, in the present instance, there was reason for suspecting it to be affected by the subterranean and submarine passage of a portion of the wire. In appeared that the time occupied by the electric current in passing from Greenwich to Brussels amounted to $\frac{1}{10}$th of a second, whereas the time occupied by the current in passing from Greenwich to Edinburgh, which was at almost double the distance, amounted only to $\frac{1}{17}$th of a second. The velocity on the American telegraphs is still greater. The President referred to experiments instituted by Mr. Latimer Clark, which, in company with Dr. Faraday, he had had the pleasure to witness; which fully supported the idea that the galvanic induction of the surrounding matter, without impairing the insulation (which is sensibly perfect), materially retards the progress of the galvanic current.

The President acknowledged the obliging conduct of the authorities of the European and Submarine Telegraph Company, who had cordially co-operated in promoting the success of this important undertaking.

Note respecting Capt. Toynbee's Paper on the Rating of Chronometers by Lunars.

In reference to the communication of Captain Toynbee, respecting a method for determining the rates of chronometers by lunar observations made at sea, which have appeared in our *Notices*, we may observe (what many of our readers are doubtless aware of) that in the ordinary application of lunar distances taken with a sextant, the longitude corresponding to each set of distances is computed. When, however, chronometers on shipboard

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